Lesson: Colors in the Garden

Author: Sarah Pounders

Overview

Outdoors is where the colors are! This pre-K lesson helps your students explore the spectrum in the garden and schoolyard.

Objective: Play a matching game in the garden to encourage kids to explore the diversity of nature's colors.

Materials:

- a spectrum of color squares made from paint sample cards or construction paper
- ribbon or metal ring
- book: *Planting a Rainbow* by Lois Ehlert

Prep: Punch a hole in your color cards and thread them onto the ring or ribbon. Make one of these "color keys" for each child.

Laying the Groundwork

Read Planting a Rainbow, and talk about how all colors can be found in nature. Review basic colors, and give each child a color key.

Exploration

- 1. Go out into the garden or schoolyard and let kids spend some time walking around looking for things that match the different colors on their color key.
- 2. Next, gather as a group and look for colors one by one. For each item identified ask the following questions:
 - Is this object alive or not alive?
 - Is this object a plant?
- 3. Try to match each color to a plant or plant part.
- 4. Older kids can go beyond basic colors to talk about the variation in colors from light to dark. For instance, prepare a color key consisting of many hues and shades of green, and find plant material to match each one.

Making Connections

- Cut pictures of different flowers, fruits, and vegetables from seed catalogs. Label paper plates as red, orange, yellow, green, blue, purple, and white, using corresponding colored markers or crayons, and then ask students to sort the pictures onto the plates.
- Many natural products can be used to make dyes. Make a rainbow "quilt" by coloring pieces of cloth using natural dyes.

To make the dyes, let kids crush fruits and vegetables – strawberries, raspberries, blackberries, cranberries, and spinach (frozen or fresh) – in bowls with a potato masher, and then add warm water. Let bowls sit for 15 to 30 minutes, and then use a strainer to separate out the pulp. Next dip "quilt squares" (small squares of white cotton cloth) in the dye. Let the squares dry and then glue them to a poster board to make a rainbow quilt.

You can get a stronger color and use a greater diversity of fruits and vegetables by placing them in boiling water (although it increases complexity and safety concerns). Additional fruits and vegetables you can use to make a boiled dye bath include red cabbage, onion skins, carrots, and beets.

Branching Out

- Eat a rainbow! Many of the pigments responsible for the color of your fruits and vegetables also provide important health benefits for us. Rather than trying to remember nutrition particulars about each fruit and vegetable, many nutritionists recommend that we "eat a rainbow" of fruits and vegetables to make sure we are getting all of our nutrients.
- Create a chart of fruits and vegetables representing each color of the rainbow using
 pictures from seed catalogs or magazines. Bring in samples of different colored fruits
 and vegetables for lunches or snacks.